

WHAT IS CLAIMED IS:

1. A DNA sequence coding for a low molecular weight phospholipase A₂ with distinct acyl specific for uncommon fatty acids, comprising a nucleotide sequence coding for an amino acid sequence with essential homology to *Ulmus glabra* phospholipase A₂ as presented in Fig. 7 or amino acid sequences essentially homologous to those encoded by the rice cDNA clones D49050, D47724, D47653 as presented in Fig. 6 and 7.

2. A method of accumulating uncommon fatty acids. in the triacylglycerols of oil seeds, oleogeneous yeasts and moulds; comprising removing said uncommon fatty acids from the membrane lipids of said seeds, yeasts and moulds by introducing, into the genome of said seeds, yeasts and moulds, a DNA sequence according to claim 1.

3. A method of accumulating uncommon fatty acids in the triacylglycerols of oil seeds, oleogenous yeasts and moulds comprising: removing said uncommon fatty acids from the membrane lipid of said seeds, yeasts and moulds, by introducing, into the genome of said seed, yeasts and moulds, a DNA sequence according to claim 1, together with a gene for an uncommon fatty acid such as medium chain, very long chain, hydroxy, epoxy and acetylenic acids.

4. A method according to claim 2. wherein said seeds, yeasts and moulds are transgeneic oil accumulating

organisms engineered to produce an uncommon fatty acid, such as medium chain, long chain, hydroxy, epoxy and acetylenic acids.

5. A method according to claim 2, wherein said seeds, yeasts and moulds are crossed with transgenic oil accumulating organisms engineered to produce an uncommon fatty acid.

6. A method according to claim 2, wherein said phospholipase A₂ enzyme has specificity for octanoic (8:0), decanoic (10:0), and dodecanoic (12:0) acids

7. Transgenic oil accumulating organisms comprising, in their genome, a low molecular weight phospholipase A₂ gene having specificity for a particular uncommon fatty acid, and the gene for said uncommon fatty acid.

8 Transgenic organisms according to claim 7, which are selected from the group consisting of oil crops, yeasts, and moulds.

9. A method of obtaining oils, comprising accumulation of oils in organisms according to claim 7.

10. Oils obtainable by the method according to claim 9.